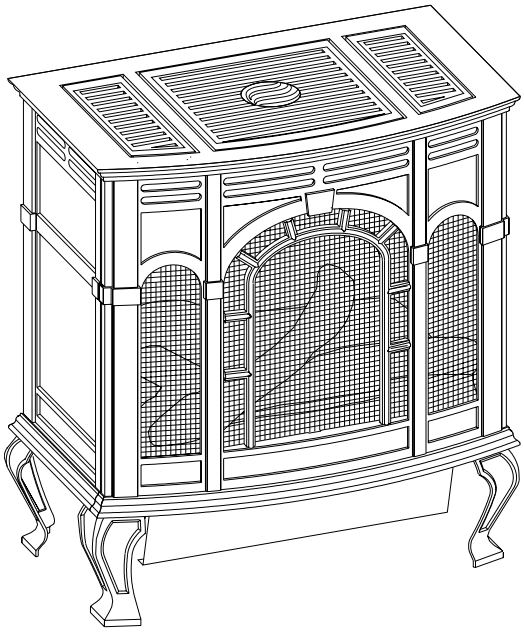
EMPIRE®
Comfort Systems

INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL



CAST IRON UNVENTED ROOM HEATER

MODEL CIVF-25-2

DESIGN CERTIFIED

EFFECTIVE DATE JULY, 2000

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer, service agency, or the gas supplier. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

FOR YOUR SAFETY: What to do if you smell gas:

- **Do not touch any electrical switches**
- **Do not try to light any appliance.**
- **Do not use the phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone.**
- **Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to page 4.

WARNING: If not installed, operated and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or from fuel combustion which can cause death or serious illness.

WATER VAPOR: A BY-PRODUCT OF UNVENTED ROOM HEATERS
Water vapor is a by-product of gas combustion. An unvented room heater produces approximately one (1) ounce (30ml) of water for every 1,000 BTU's (.3KW's) of gas input per hour. Refer to page 4.

Introduction

Always consult your local Building Department regarding regulations, codes or ordinances which apply to the installation of an unvented room heater.

This appliance may be installed in an aftermarket* permanently located, manufactured (mobile) home, where not prohibited by state or local codes.

*Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer.

This appliance is only for use with the type of gas indicated on the rating plate.

Instructions to Installer

1. Installer must leave instruction manual with owner after installation.
2. Installer must have owner fill out and mail warranty card supplied with unvented room heater.
3. Installer should show owner how to start and operate unvented room heater.

WARNING: ANY CHANGE TO THIS HEATER OR ITS CONTROLS CAN BE DANGEROUS.

Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the heater.

General Information

This CIVF-25 is design certified in accordance with American National Standards Institute Z21.11.2b-1998 by the American Gas Associaton as an Unvented Room Heater and should be installed according to these instructions.

Attention: During initial use of ceramic log you will detect an odor as the ceramic log is cured. Also, during the curing process the ceramic log will burn with a yellow flame.

Any alteration of the original design, installed other than as shown in these instructions or use with a type of gas not shown on the rating plate is the responsibility of the person and company making the change.

Important

All correspondence should refer to complete Model No., Serial No. and type of gas.

Notice: During initial firing of this unit, its paint will bake out, and smoke will occur. To prevent triggering of smoke alarms, ventilate the room in which the unit is installed.

THIS IS A HEATING APPLIANCE

DO NOT OPERATE THIS APPLIANCE WITHOUT FRONT PANEL INSTALLED.

- **An unvented room heater having an input rating of more than 10,000 Btu per hour shall not be installed in a bedroom or bathroom.**
- **Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.**
- **Children and adults should be alerted to the hazard of high surface temperature and should stay away to avoid burns or clothing ignition.**
- **Young children should be carefully supervised when they are in the same room with the appliance.**
- **Do not place clothing or other flammable material on or near the appliance.**
- **Keep burner and control compartment clean.**
- **Installation and repair should be done by a QUALIFIED SERVICE PERSON. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.**
- **DO make a periodic visual check of pilot and burners. Clean and replace damaged parts.**
- **DO NOT use this room heater if any part has been under water. Immediately call a qualified service technician to inspect the room heater and to replace any part of the control system and any gas control which has been under water.**
- **Due to high surface temperatures, keep children, clothing and furniture away.**
- **Under no circumstances should any solid fuels (wood, coal, paper or cardboard etc.) be used in this appliance.**
- **The flow of combustion and ventilation air must not be obstructed in any way.**

WARNING

When used without adequate combustion and ventilation air, heater may give off CARBON MONOXIDE, an odorless, poisonous gas.

Do not install heater until all necessary provisions are made for combustion and ventilation air. Consult the written instructions provided with the heater for information concerning combustion and ventilation air. In the absence of instructions, refer to the National Fuel Gas Code, ANSI Z223.1, Section 5.3 or applicable local codes.

This heater is equipped with a PILOT LIGHT SAFETY SYSTEM designed to turn off the heater if not enough fresh air is available.

DO NOT TAMPER WITH PILOT LIGHT SAFETY SYSTEM!

If heater shuts off, do not relight until you provide fresh air.

If heater keeps shutting off, have it serviced. Keep burner and control compartment clean.

CARBON MONOXIDE POISONING MAY LEAD TO DEATH.

Early signs of carbon monoxide poisoning resemble the flu, with headache, dizziness and/or nausea. If you have these signs, heater may not be working properly. Get fresh air at once! Have heater serviced.

Some people — pregnant women, persons with heart or lung disease, anemia, those under the influence of alcohol , those at high altitudes — are more affected by carbon monoxide than others.

The pilot light safety system senses the depletion of oxygen at its location. If this heater is installed in a structure having a high vertical dimension, the possibility exists that the oxygen supply at the higher levels will be less than that at the heater. In this type of application, a fan to circulate the structure air will minimize this effect. The use of this fan will also improve the comfort level in the structure. When a fan is used to circulate air, it should be located so that the air flow is not directed at the burner.

SAFETY INFORMATION FOR USERS OF LP-GAS

Propane (LP-Gas) is a flammable gas which can cause fires and explosions. In its natural state, propane is odorless and colorless. You may not know all the following safety precautions which can protect both you and your family from an accident. Read them carefully now, then review them point by point with the members of your household. Someday when there may not be a minute to lose, everyone's safety will depend on knowing exactly what to do. If, after reading the following information, you feel you still need more information, please contact your gas supplier.

LP-GAS WARNING ODOR

If a gas leak happens, you should be able to smell the gas because of the odorant put in the LP-Gas. That's your signal to go into immediate action!

- Do not operate electric switches, light matches, use your phone. Do not do anything that could ignite the gas.
- Get everyone out of the building, vehicle, trailer, or area. Do that IMMEDIATELY.
- Close all gas tank or cylinder supply valves.
- LP-Gas is heavier than air and may settle in low areas such as basements. When you have reason to suspect a gas leak, keep out of basements and other low areas. Stay out until firefighters declare them to be safe.
- Use your neighbor's phone and call a trained LP-Gas service person and the fire department. Even though you may not continue to smell gas, do not turn on the gas again. Do not re-enter the building, vehicle, trailer, or area.
- **Finally,** let the service man and firefighters check for escaped gas. Have them air out the area before you return. Properly trained LP-Gas service people should repair the leak, then check and relight the gas appliance for you.

NO ODOR DETECTED - ODOR FADE

Some people cannot smell well. Some people cannot smell the odor of the chemical stench put into the gas. You must find out if you can smell the odorant in propane. Smoking can decrease your ability to smell. Being around an odor for a time can affect your sensitivity or ability to detect that odor. Sometimes other odors in the area mask the gas odor. People may not smell the gas odor or their minds are on something else. Thinking about smelling a gas odor can make it easier to smell.

The odorant in LP-gas is colorless, and it can fade under some circumstances. For example, if there is an underground leak, the movement of the gas through soil can filter the odorant. Odorants in LP-Gas also are subject to oxidation. This fading can occur if there is rust inside the storage tank or in iron gas pipes.

The odorant in escaped gas can adsorb or absorb onto or into walls, masonry and other materials and fabrics in a room. That will take some of the odorant out of the gas, reducing its odor intensity.

LP-Gas may stratify in a closed area, and the odor intensity could vary at different levels. Since it is heavier than air, there may be more odor at lower levels. Always be sensitive to the slightest gas odor. If you detect any odor, treat it as a serious leak. Immediately go into action as instructed earlier.

SOME POINTS TO REMEMBER

- **Learn to recognize the odor of LP-gas.** Your local LP-Gas Dealer can give you a "Scratch and Sniff" pamphlet. Use it to find out what the propane odor smells like. If you suspect that your LP-Gas has a weak or abnormal odor, call your LP-Gas Dealer.
- If you are not qualified, do not light pilot lights, perform service, or make adjustments to appliances on the LP-Gas system. If you are qualified, consciously think about the odor of LP-Gas prior to and while lighting pilot lights or performing service or making adjustments.
- Sometimes a basement or a closed-up house has a musty smell that can cover up the LP-Gas odor. Do not try to light pilot lights, perform service, or make adjustments in an area where the conditions are such that you may not detect the odor if there has been a leak of LP-Gas.
- Odor fade, due to oxidation by rust or adsorption on walls of new cylinders and tanks, is possible. Therefore, people should be particularly alert and careful when new tanks or cylinders are placed in service. Odor fade can occur in new tanks, or reinstalled old tanks, if they are filled and allowed to set too long before refilling. Cylinders and tanks which have been out of service for a time may develop internal rust which will cause odor fade. If such conditions are suspected to exist, a periodic sniff test of the gas is advisable. **If you have any question about the gas odor, call your LP-gas dealer. A periodic sniff test of the LP-gas is a good safety measure under any condition.**
- If, at any time, you do not smell the LP-Gas odorant and you think you should, assume you have a leak. Then take the same immediate action recommended above for the occasion when you do detect the odorized LP-Gas.
- If you experience a complete "gas out," (the container is under no vapor pressure), turn the tank valve off immediately. If the container valve is left on, the container may draw in some air through openings such as pilot light orifices. If this occurs, some new internal rusting could occur. If the valve is left open, then treat the container as a new tank. Always be sure your container is under vapor pressure by turning it off at the container before it goes completely empty or having it refilled before it is completely empty.

Specifications

Model		CIVF-25
Input	BTU/HR (KW/H) Max. (LP/NAT)	25,000 (7.3)
	BTU/HR (KW/H) Min. LP	18,000 (5.3)
	BTU/HR (KW/H) Min. Nat.	17,000 (5.0)
Height		27 3/4" (70.5cm)
Width		25 1/2" (64.8cm)
Depth		15 1/2" (39.4cm)
Gas Inlet		3/8" (9.5mm)
Stove Casting (Must be ordered with Firebox.)		
CIFB-1	Flat Black	
CIPB-1	Porcelain Black	
CIPG-1	Porcelain Green	
CIPS-1	Porcelain Sand	
CIPN-1	Porcelain Navy	
CIPR-1	Porcelain Red	
Accessories		
GWSG-T	750 Millivolt Wall Thermostat	
FRBC-1	Battery Operated Remote Control	
FRBTC-1	Battery Operated Remote Control with Thermostat	
FREC-1	Electric Remote Control	
FWS-1	Wall Switch	
CIB-2	Automatic Blower	
Stone Inlay Replaces Standard Grille Top		
CII-2	Stone Inlay	Empress Green
CII-3	Stone Inlay	Hunan Jade
CII-4	Stone Inlay	Gray Botticino
CII-5	Stone Inlay	Azul
CII-6	Stone Inlay	Salome
CII-7	Stone Inlay	Black Swan

Qualified Installing Agency

Installation and replacement of gas piping, gas utilization equipment or accessories and repair and servicing of equipment shall be performed only by a qualified agency. The term "qualified agency" means any individual, firm, corporation or company which either in person or through a representative is engaged in and is responsible for (a) the installation or replacement of gas piping or (b) the connection, installation, repair or servicing of equipment, who is experienced in such work, familiar with all precautions required and has complied with all the requirements of the authority having jurisdiction.

The installation must conform with local codes or, in the absence of local codes, with the *National Fuel Gas Code, ANSI Z223.1/NFPA 54.**

**Available from the American National Standards Institute, Inc., 11 West 42nd St., New York, N.Y. 10036.*

Water Vapor: A By-Product of Unvented Room Heaters

Water vapor is a by-product of gas combustion. An unvented room heater produces approximately one (1) ounce (30ml) of water for every 1,000 BTU's (.3KW's) of gas input per hour.

Unvented room heaters are recommended as supplemental heat (a room) rather than a primary heat source (an entire house). In most supplemental heat applications, the water vapor does not create a problem. In most applications, the water vapor enhances the low humidity atmosphere experienced during cold weather.

The following steps will help insure that water vapor does not become a problem.

1. Be sure the heater is sized properly for the application, including ample combustion air and circulation air.
2. If high humidity is experienced, a dehumidifier may be used to help lower the water vapor content of the air.
3. Do not use an unvented room heater as the primary heat source.

Provisions for Adequate Combustion and Ventilation Air

This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

The *National Fuel Gas Code, ANSI Z223.1* defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 Btu per hour ($4.8m^3$ per kw) of the aggregate input rating of all appliances installed in that space and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 Btu per hour ($4.8m^3$ per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the unconfined space.

The following example is for determining the volume of a typical area in which the CIVF-25 may be located and for determining if this area fits the definition of an unconfined space.

The maximum input of the CIVF-25 is 25,000 Btu per hour. Based on the 50 cubic feet per 1,000 Btu per hour formula, the **minimum** area that is an unconfined space for installation of the CIVF-25 is 1,250 cubic feet, 50 cubic feet x 25 = 1,250 cubic feet. To determine the cubic feet of the area in which the CIVF-25 is to be installed, measure the length, width and height of the area. Example: The area measures 16 feet in length, 10 feet in width and 8 feet in height, the area is 1,280 cubic feet. The CIVF-25 can be installed in this unconfined space with no requirement to provide additional combustion and ventilation air.

Warning: If the area in which the heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the *National Fuel Gas Code, ANSI Z223.1*, Section 5.3 or applicable local codes.

Unusually Tight Construction

The air that leaks around doors and windows may provide enough fresh air for combustion and ventilation. However, in buildings of unusually tight construction, you must provide additional fresh air.

Unusually tight construction is defined as construction where:

a. Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of one perm or less with openings gasketed or sealed, and
b. Weatherstripping has been added on openable windows and doors, and
c. Caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

If the CIVF-25 heater is installed in a building of unusually tight construction, adequate air for combustion, ventilation and dilution of flue gases shall be provided in accordance with ANSI Z223.1/NFPA54.

Clearances (Figures 1, 2 and 3)

When facing the front of the appliance the following minimum clearances to combustible construction must be maintained.

Top of appliance (ceiling)	24 inches
Rear Wall	2 inches
Side Wall	6 inches
Heater Corners (45° angle) to Wall	4 inches
Floor	0 inches

Provide adequate clearances around air openings.

Adequate accessibility clearances for purposes of servicing and proper operation must be provided.

Installation on Rugs and Vinyl

If this appliance is installed directly on carpeting, vinyl or other combustible material, other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.

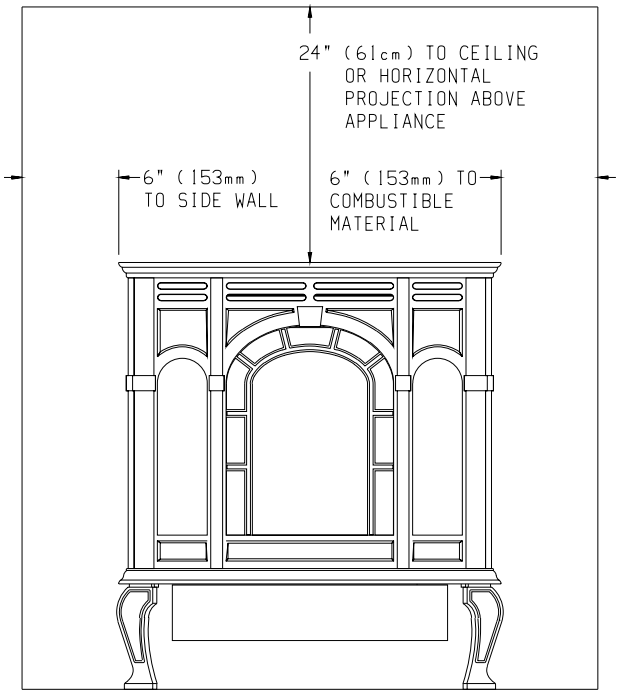


Figure 1

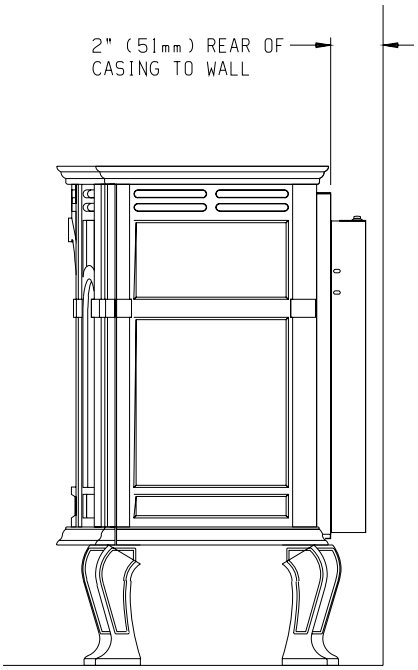


Figure 3

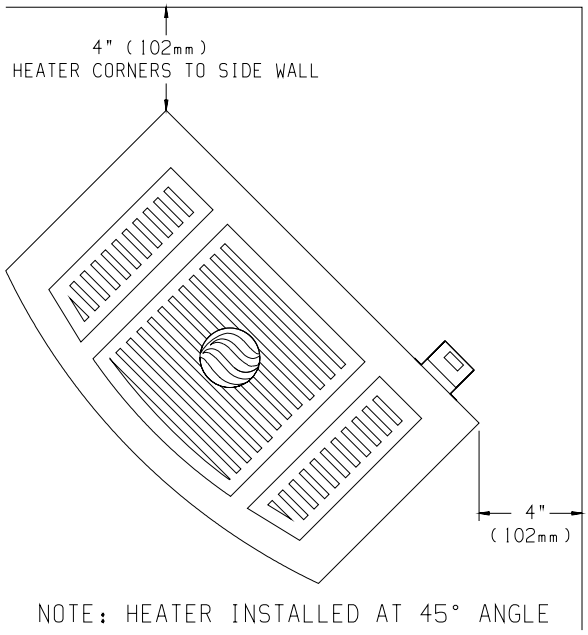


Figure 2

Appliance Hardware Package (Figure 4)

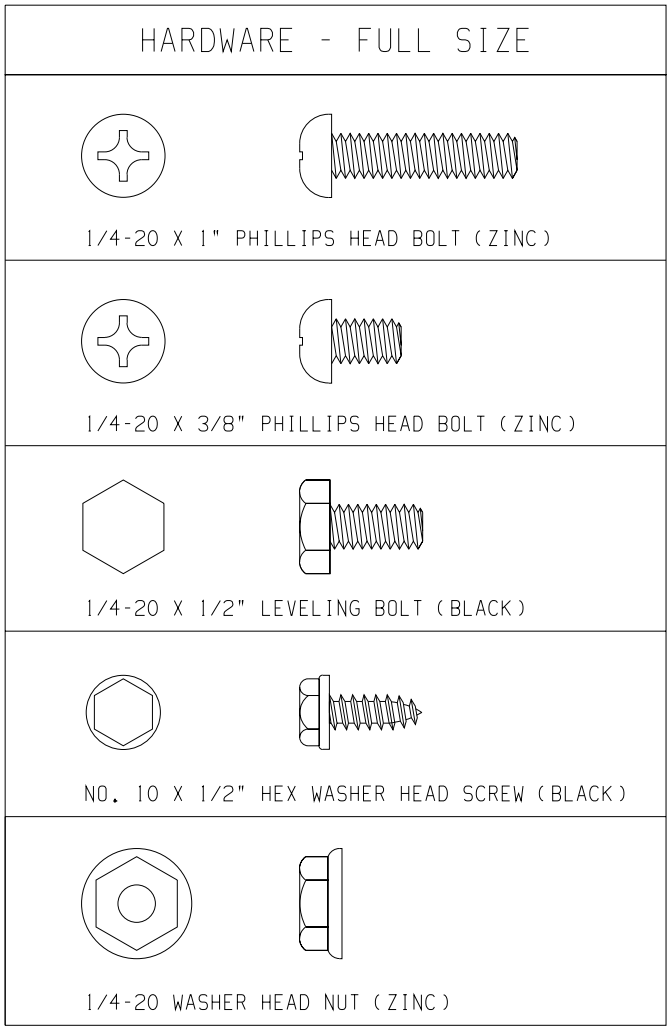


Figure 4

Appliance Hardware Package Parts List

Part Description	Part Number	Quantity Supplied
1/4-20 x 1" Phillips Head Bolt	R-3188	4
1/4-20 x 3/8" Phillips Head Bolt	R-3646	16
1/4-20 x 1/2" Leveling Bolt	R-3747	4
No. 10 x 1/2" Hex Washer Head Screw	R-2737	6
1/4-20 Washer Head Nut	R-3185	4
Leg Pad "A" (see Figure 5)	CI-008	2
Leg Pad "B" (see Figure 5)	CI-009	2
1-1/4" x 1/2" Retaining Tab (see Figure 8)	CI-007	4
1/4" x 9/32 Washer (Not Shown)	R-1150	8

Assembly of Cast Iron (Outer Casing) Stove Casting (Figures 5, 6, 7, 8, and 9)

Attention: Included in the hardware package are (8) 1/4" inside diameter washers. A 1/4" washer may be used with a 1/4-20 x 3/8" bolt when assembling the stove casting parts. If a bolt hole is not tapped deep enough for a tight fit between stove casting parts, the 1/4" washer can be used as a shim to provide a tight fit.

The 1/4" washers are not required for assembly of the stove casting if all the bolt holes are tapped to a proper depth.

Additonal 1/4" washers are to be purchased locally.

1. Place porcelain casting pieces on a non-abrasive surface in order to protect the porcelain finish. The exterior of the porcelain casting pieces should be facing the non-abrasive surface.
2. The assembly of the casting is accomplished in 6 stages:
   A. Attaching legs to the sides (Figure 5).
   B. Attaching rear cover to sides (Figure 6).
   C. Removing protective packaging from casing front and window (Figure 7).
   D. Assembly of front by attaching retaining tabs and placing front on unit (Figure 8).
   E. Inserting firebox into partially completed assembly (Figure 9).
   F. Placing top on unit.
3. Refer to Figure 5, the leg pads will have the letter "A" and "B" stamped into the metal. Place leg pad "A" and leg pad "B" at the bottom of each casing side. Leg pad "A" attaches to the front of the casing side, right and to the rear of the casing side, left. Leg pad "B" attaches to the rear of the casing side, right and to the front of the casing side, left. Position the 3/4" flange on the leg pad against the (2) locator dimples on the casing side. The 3/4" flange must be facing upward, toward the top louver openings on the casing side. Attach the two **rear** leg pads to the casing sides with (2) 3/8" bolts. Attach but do not completely tighten the two **front** leg pads to the casing sides with (2) 3/8" bolts. **Attention:** The front leg pads can be adjusted to provide a snug fit between the casing front and the casing sides.
4. Attach (4) leveling bolts to the bottom of the (4) legs.
5. Align the 3/8" hole at the top of the leg with the 3/8" hole in the leg pad. **Attention:** For proper positioning of the leg to the leg pad the (2) 1-1/2" top edges of the leg must be placed flush and parallel to the (2) edges on the leg pad. Attach leg to leg pad by inserting (1) 1" bolt through the leg pad and into the leg, secure bolt with 1/4" nut.
6. Insert (2) 3/8" bolts into the (2) holes on the edges of the casing sides. The bolts should only be threaded half-way into the holes in order to allow for clearance when the casing back is attached to the casing sides.
7. Refer to Figure 6, the rear cover has (4) keyholes for attachment to the casing sides. Stand the casing sides on the floor with the (2) bolts attached half-way into the edges of the rear cover positioned at the rear. The large diameter holes in the keyholes of the rear cover will be toward the floor. Working with one casing side at a time, place the large diameter holes in the keyholes over and behind both of the bolts at the same time. Push downward on the rear cover to lock the keyholes into position behind the bolts. Finish tightening both bolts to secure rear cover to casing side. Repeat this procedure to secure rear cover to the second casing side.
8. Position the completed portion of the casing in the approximate location for installation as the completed assembly will be heavy.
9. Refer to Figure 7, removing protective packing foam from casing front and window. Remove the (1) 3/4" bolt and (1) 1/4" washer from top of window. Remove (1) 3/8" bolt and 1 - 5/8" x 3/4" retaining tab from bottom of window. Remove the window from casing front. Remove the protective sheet of foam from the casing front.
   Place the window into the casing front. Attach the top of the window to the casing front with (1) 1/4" washer and (1) 3/4" bolt. Place the 1 -5/8" x 3/4" retaining tab into the locator notch on the bottom of the casing front. Attach the bottom of the window to the casing front by inserting (1) 3/8" bolt through retaining tab and into locator notch.

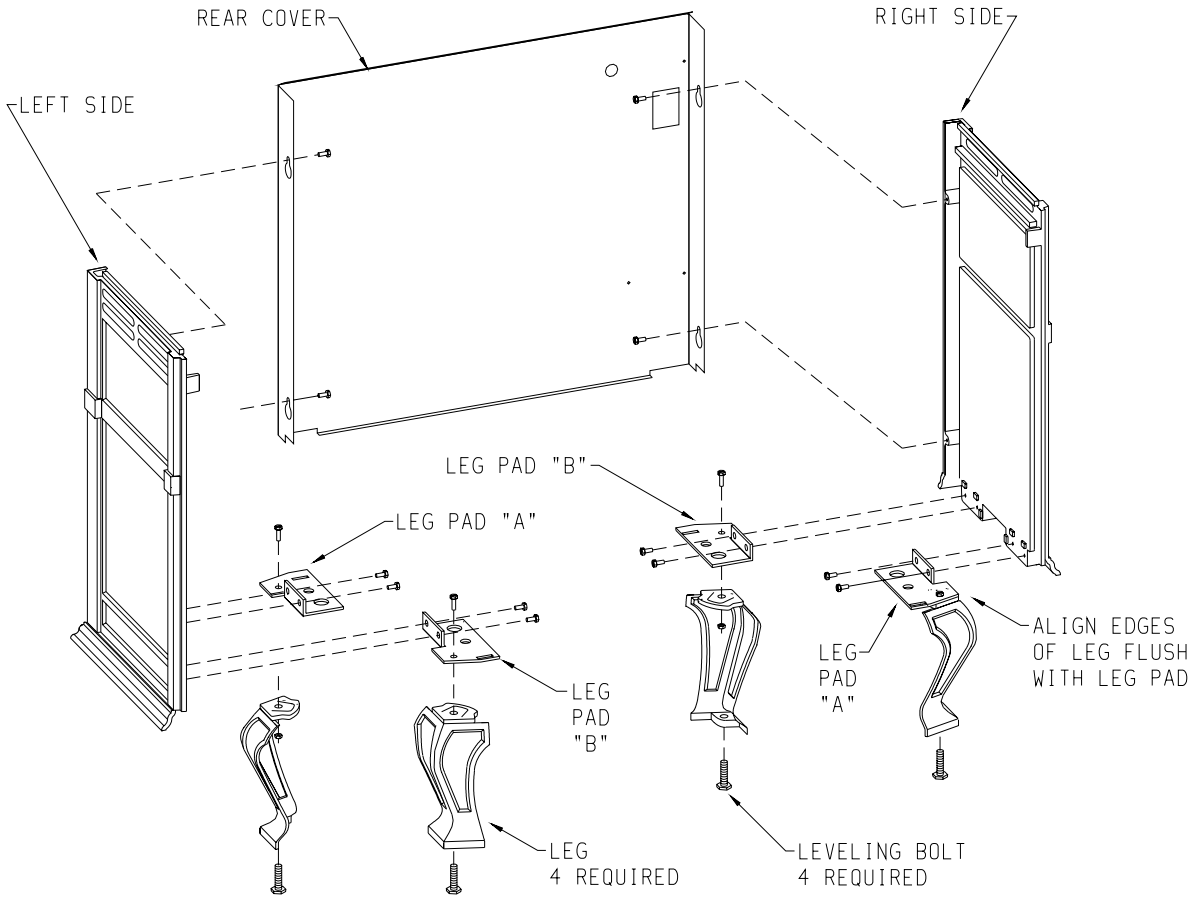


Figure 5

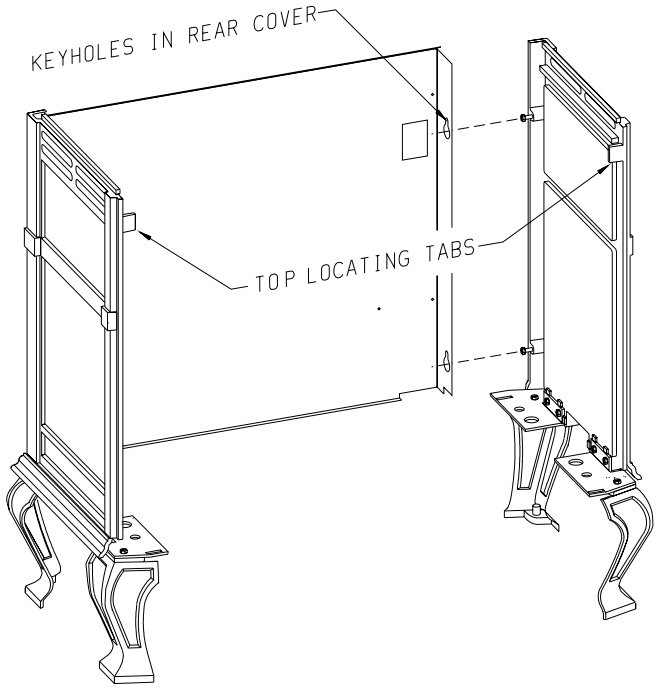


Figure 6

10. Attach the (4) 1-1/4" x 1/2" retaining tabs to the casing front with (4) 3/8" bolts. The retaining tabs should be positioned downward, from the casing front, top to the casing front, bottom.
11. Refer to Figure 8, attach casing front to outer casing by using the (4) retaining tabs on the casing front. The (2) top, retaining tabs on the casing front will be placed behind the (2) top, locator tabs on the front of the casing sides. The (2) bottom, retaining tabs will be inserted into the (2) 9/16" slots on the front, leg pads. Place the top, retaining tabs behind the top, locator tabs as you pivot inward the bottom of the casing front in order to insert the bottom, retaining tabs into the slots.
12. The following procedure will provide a snug fit between the casing front and the casing sides. Grasp the right, front leg, push inward on the leg in order to provide a snug fit between the casing front and the casing side. Continue to hold the right, front leg as you completely tighten the (2) 3/8" bolts that attach the leg pad to the right, casing side. Repeat procedure for left, front leg to achieve a snug fit between the casing front and the casing side.
13. Remove the casing front from the outer casing.
14. Refer to Figure 9, the appliance firebox can now be inserted into the outer casing. Center the firebox in the outer casing. **Attention:** Remove (1) Phillips-head screw in the top of the valve cover. The screw is used to secure the valve cover in place during shipping. The (1) Phillips-head screw can be discarded.
15. Attach casing front to outer casing as described in Step 11.
16. Place the casing top onto the outer casing. The casing top nests into the outer casing.
17. Insert center grille, left grille and right grille into casing top.
18. Level appliance by adjusting leveling bolts.
19. Assembly of cast iron (outer casing) stove casting is completed.

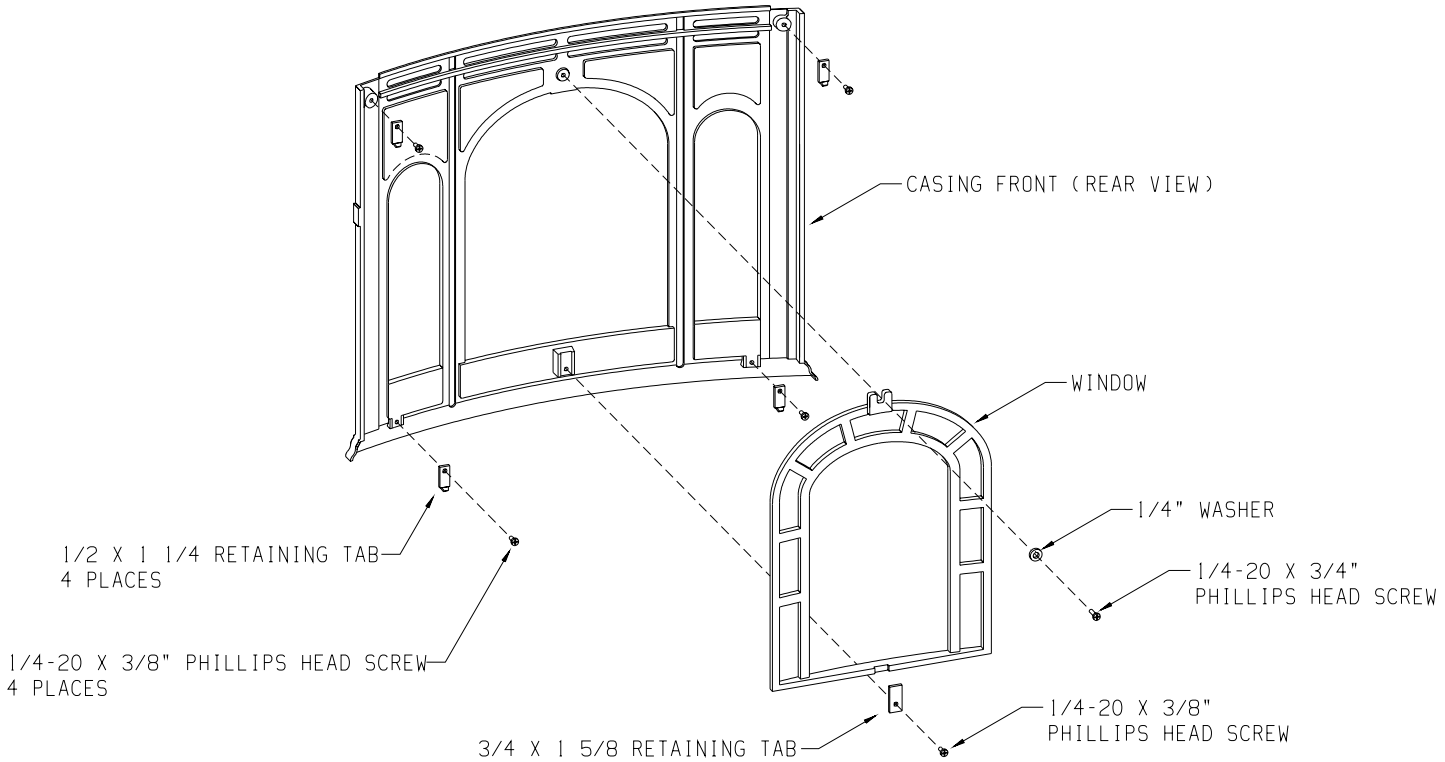


Figure 7

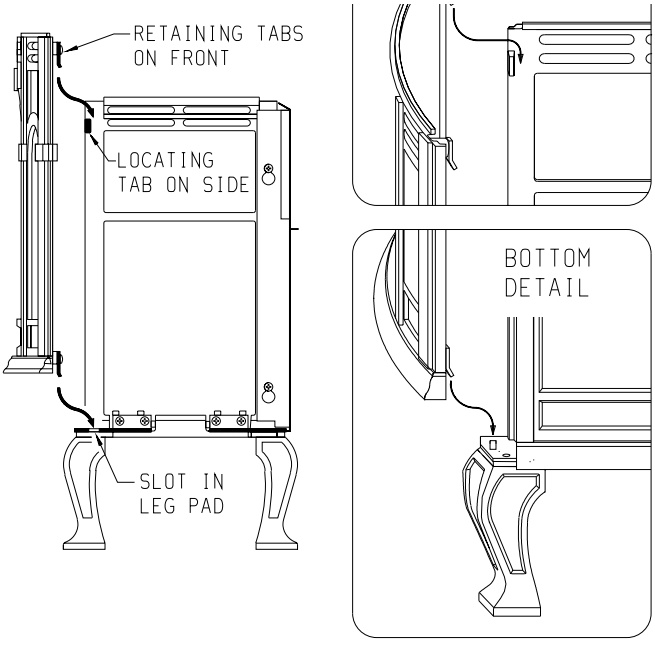


Figure 8

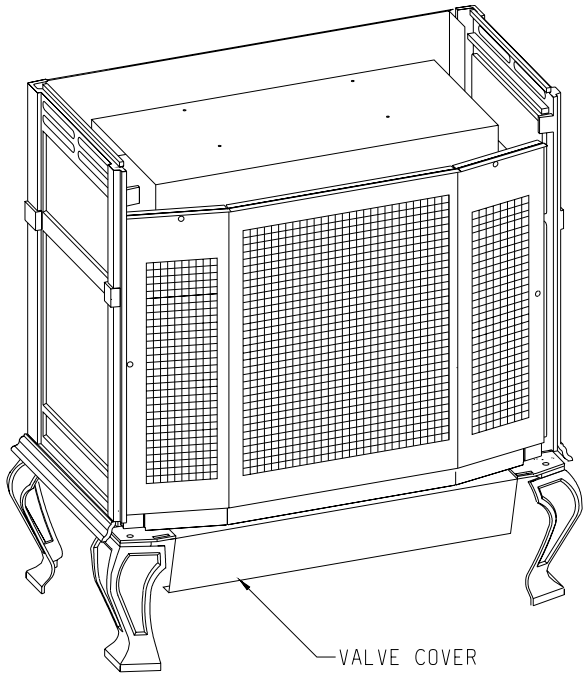


Figure 9

Stone Inlay Replacement of Standard Grille Top

Whenever the standard grille top is replaced with a stone inlay you must install the top shield and heat shield, which are provided with the stone inlay.

Installation of Optional Stone Inlay

1. Remove left grille, center grille and right grille from casing top.
2. Remove casing top from outer casing.

3. Place the casing top on a non-abrasive surface in order to protect the porcelain finish. The exterior of the casing top should be facing the non-abrasive surface.
4. Attach 11 5/8" x 11 5/8" top shield to the interior of the casing top with (1) 3/8" bolt provided in hardware package.
5. Locate the (4) screw holes on the heat exchanger top. The screw holes are 8 3/4" apart. Position the angled front edge on the 12" x 19 3/8" heat shield with the front of the appliance. Align the (4) tabs with clearance holes on the 12" x 19 3/8" heat shield with the (4) screw holes on the heat exchanger top. Attach the 12" x 19 3/8" heat shield to the heat exchanger top with (4) 1/2" hex-head screws provided in hardware package.
6. Place the casing top onto the outer casing. The casing top nests into the outer casing.
7. Insert center stone inlay, left stone inlay and right stone inlay into casing top.
8. Installation of stone inlay is completed.

Parts List

Part Description	Part Number	Quantity Supplied
11 5/8" x 11 5/8" Top Shield	CI-091	1
12" x 19 3/8" Heat Shield	CI-092	1
3/8" Bolt	R-3646	1
1/2" Hex-Head Screw	R-2737	4

Installation of Wire Channel Assembly (Figure 10)

The ON/OFF/REMOTE switch with harness is factory installed into the switch box.

After the appliance housing is installed into the cast iron outer casing the wire channel can be installed.

1. Attach switch box on the left side of casing back with (2) 10 x 1/2" provided screws.
2. Route wires from ON/OFF/REMOTE switch within wire channel.
3. Attach wire channel on the left side of the casing back with (4) 10 x 1/2" provided screws.
4. Attach the black and green (wires) female push-ons to the TH/TP and TH (two outside male tabs) terminals on gas valve.

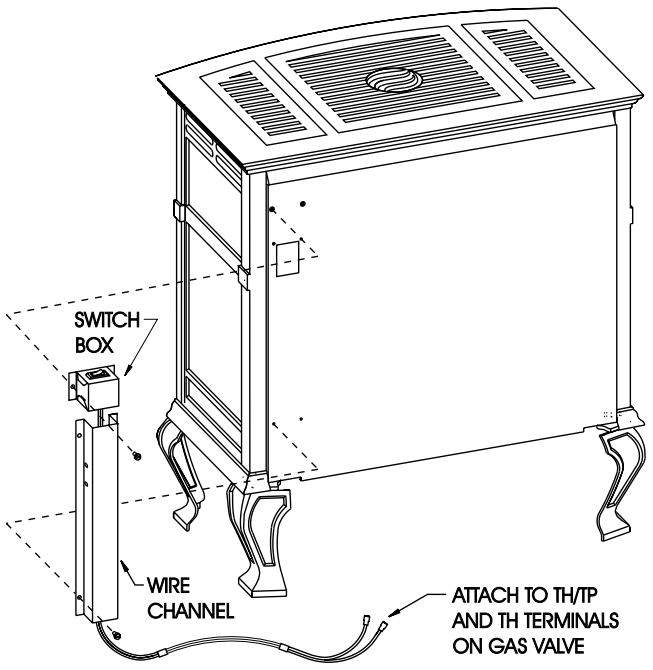


Figure 10

Gas Supply (Figure 11)

Check all local codes for requirements, especially for the size and type of gas supply line required.

Recommended Gas Pipe Diameter

Pipe Length (Feet)	Schedule 40 Pipe Inside Diameter		Tubing, Type L Outside Diameter	
	Nat.	L.P.	Nat.	L.P.
0-10	1/2" 1.3 cm	3/8" 1.0 cm	1/2" 1.3 cm	3/8" 1.0 cm
10-40	1/2" 1.3 cm	1/2" 1.3 cm	5/8" 1.6 cm	1/2" 1.3 cm
40-100	1/2" 1.3 cm	1/2" 1.3 cm	3/4" 1.9 cm	1/2" 1.3 cm
100-150	3/4" 1.9 cm	1/2" 1.3 cm	7/8" 2.2 cm	3/4" 1.9 cm

Note: Never use plastic pipe. Check to confirm whether your local codes allow copper tubing or galvanized.

Note: Since some municipalities have additional local codes, it is always best to consult your local authority and installation code.

Installing a New Main Gas Cock

Each appliance should have its own manual gas cock.

A manual main gas cock should be located in the vicinity of the unit. Where none exists, or where its size or location is not adequate, contact your local authorized installer for installation or relocation.

Compounds used on threaded joints of gas piping shall be resistant to the action of liquefied petroleum gases. The gas lines must be checked for leaks by the installer. This should be done with a soap solution watching for bubbles on all exposed connections, and if unexposed, a pressure test should be made.

Never use an exposed flame to check for leaks. Appliance must be disconnected from piping at inlet of control valve and pipe capped or plugged for pressure test. Never pressure test with appliance connected; control valve will sustain damage!

A gas valve and ground joint union should be installed in the gas line upstream of the gas control to aid in servicing. It is required by the National Fuel Gas Code that a drip line be installed near the gas inlet. This should consist of a vertical length of pipe tee connected into the gas line that is capped on the bottom in which condensation and foreign particles may collect.

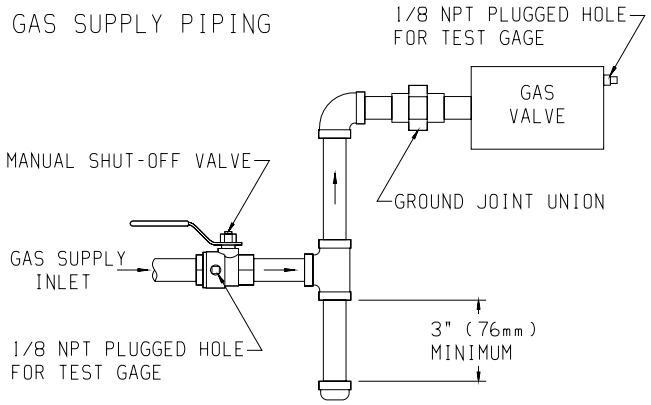


Figure 11

Method of Installing a Tee Fitting Sediment Trap

The use of the following gas connectors is recommended:

— ANS Z21.24 Appliance Connectors of Corrugated Metal Tubing and Fittings

— ANS Z21.45 Assembled Flexible Appliance Connectors of Other Than All-Metal Construction

The above connectors may be used if acceptable by the authority having jurisdiction.

Pressure Testing of the Gas Supply System

1. To check the inlet pressure to the gas valve, a 1/8" (3mm) N.P.T. plugged tapping, accessible for test gauge connection, must be placed immediately upstream of the gas supply connection to the appliance.

2. The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).
3. The appliance must be isolated from the gas supply piping system by closing its equipment shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

Attention! If one of the above procedures results in pressures in excess of 1/2 psig (14" w.c.) (3.5 kPa) on the appliance gas valve, it will result in a hazardous condition.

Checking Manifold Pressure

Natural gas will have a manifold pressure of approximately 3.5" w.c. (.871kPa) for maximum input or 1.7" w.c. (.423kPa) for minimum input at the pressure regulator outlet with the inlet pressure to the pressure regulator from a minimum of 5.0" w.c. (1.245kPa) for the purpose of input adjustment to a maximum of 10.5" w.c. (2.614kPa). Propane gas will have a manifold pressure approximately 10.0"w.c. (2.49kPa) for maximum input or 6.3"w.c. (1.568kPa) for minimum input at the pressure regulator outlet with the inlet pressure to the pressure regulator from a minimum of 11.0"w.c. (2.739kPa) for the purpose of input adjustment to a maximum of 13.0"w.c. (3.237kPa).

NOTE: The gas control is equipped with a captured screw type pressure test point, therefore it is not necessary to provide a 1/8" test point up stream of the control.

A test gauge connection is located downstream of the gas appliance pressure regulator for measuring gas pressure. The connection is a 1/8 inch 3mm) N.P.T. plugged tapping.

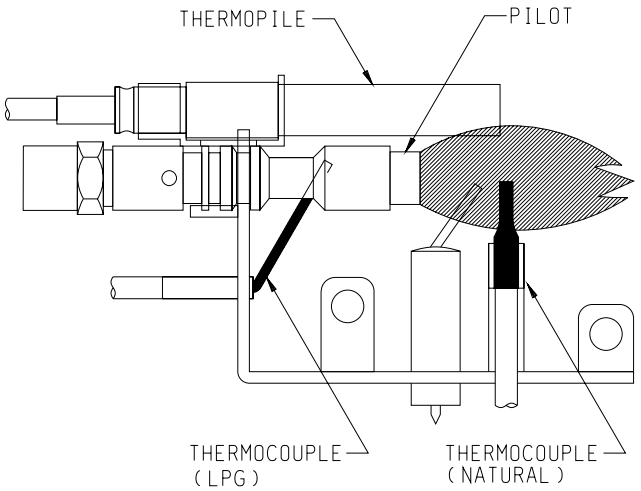
High Altitudes

For altitudes/elevations above 2,000 feet (610m), ratings should be reduced at the rate of 4 percent for each 1,000 feet (305m) above sea level. Contact the manufacturer or your gas company before changing spud/orifice size.

Keep appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.

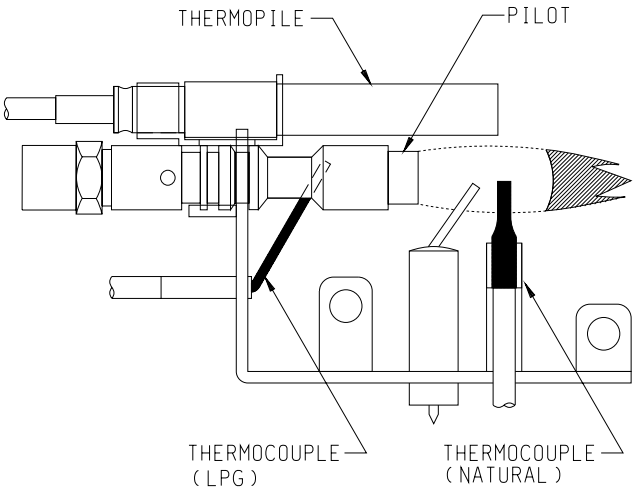
Pilot Flame Pattern (Figure 12 and Figure 13)

Figure 12 shows a correct pilot flame pattern. The correct flame will be blue and will extend beyond the thermocouple and thermopile. The flame will surround the thermocouple and thermopile just below the tip. A slight yellow flame may occur where the pilot flame and main burner flame meet. Figure 13 shows an incorrect pilot flame pattern. The incorrect pilot flame is not touching the thermocouple or thermopile. This will cause the thermocouple or thermopile to cool. When the thermocouple cools, the heater will shut down.



Correct Pilot Flame Pattern

Figure 12



Incorrect Pilot Flame Pattern

Figure 13

If pilot flame pattern is incorrect, as shown in Figure 13

- See Troubleshooting, page 15.

Cleaning and Maintenance/Pilot

Oxygen Depletion Sensor Pilot (Figure 14)

When the pilot has a large yellow tip flame, clean the Oxygen Depletion Sensor as follows:

1. Clean the ODS pilot by loosening nut B from the pilot tubing. When this procedure is required, grasp nut A with an open wrench.
2. Blow air pressure through the holes indicated by the arrows. This will blow out foreign materials such as dust, lint and spider webs. Tighten nut B also by grasping nut A.

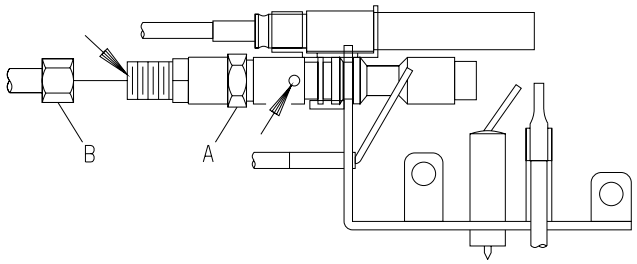
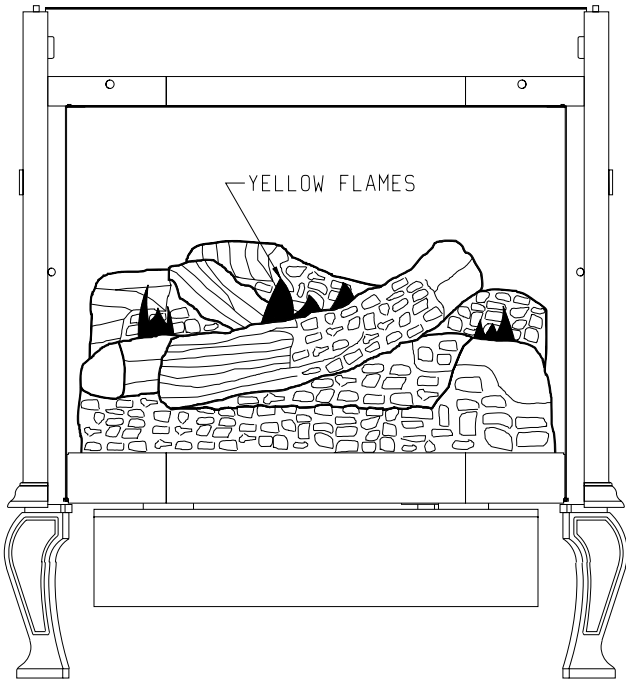
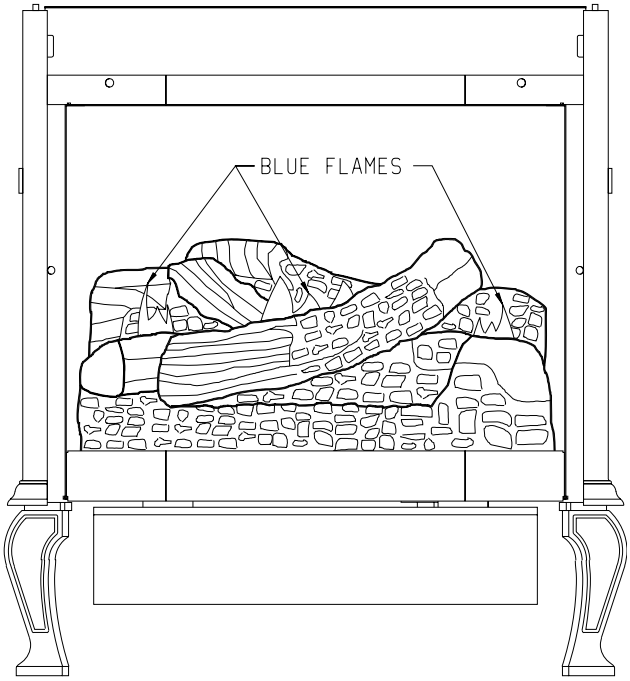


Figure 14

Main Burner Flame Pattern (Figure 15 and Figure 16)
Figure 15 shows a correct main burner flame pattern. Figure 16 shows an incorrect main burner flame pattern.



Correct Main Burner Flame
Figure 15



Incorrect Main Burner Flame
Figure 16

If main burner flame pattern is incorrect, as shown in Figure 16
- See Troubleshooting, page 15.

Cleaning and Maintenance / Main Burner
Warning: Turn off heater and let cool before cleaning

After use, cleaning of the main burner may be required for the proper flame. The main burner may be cleaned by applying air pressure to the ports on the main burner.

Cleaning the Log Set and Firebox
During the annual inspection and maintenance appointment, the service person should clean dust, lint, and any light accumulation from the logs and the firebox area. An extra-soft brush should be used on the logs as they are extremely fragile; a vacuum cleaner may be used on the firebox. If at any time the logs cannot be removed or installed without forcing, the cause must be found. The logs must never be forced.

CAUTION: The ceramic logs are durable when handled and installed properly. However, they are delicate and may be damaged easily if not handled with care. Handling damage to the ceramic logs is not covered by warranty.

DO NOT HANDLE LOGS WHILE THEY ARE HOT. ALLOW PLENTY OF TIME FOR THE APPLIANCE TO COOL COMPLETELY BEFORE HANDLING.

OPERATING INSTRUCTIONS
CIVF-25 ON/OFF/REMOTE Switch
CIVF-25 is equipped with an ON/OFF/REMOTE switch which is located on the wiring chase. A wire harness is attached to the ON/OFF/REMOTE switch. The red, black and green (wires) female push-ons attach to the ON/OFF/REMOTE switch. At the opposite end of the wire harness, the black and green (wires) female push-ons attach to the gas valve. An additional green wire and the red wire, which are stripped and bare, will attach to the 750 millivolt wall thermostat accessory, or, to one of the other accessories that can be purchased for use with your log set.

Operation of ON/OFF/REMOTE Switch with no Accessories
To ignite main burner, turn the control knob on the gas valve from the PILOT position to the ON position. Turn the ON/OFF/REMOTE switch from the OFF position to the ON position. The additional green wire and red wire, which are stripped and bare are not used.

Operation of ON/OFF/REMOTE Switch with Accessories
750 Millivolt Wall Thermostat, GWSG-T
Connect the green and red, stripped and bare, wires on the ON/OFF/REMOTE switch wire harness to the wall thermostat. Turn the ON/OFF/REMOTE switch on the wiring chase to the REMOTE position. Set the wall thermostat to the desired temperature.

It is important to use wire of a gauge proper for the length of the wire:

RECOMMENDED WIRE GAUGES

Maximum Length	*Wire Gauge*
1' to 10'	18
10' to 25'	16
25' to 35'	14

Wall Switch, FWS-1
Connect the green and red, stripped and bare, wires on the ON/OFF/REMOTE switch wire harness to the wall switch. Turn the ON/OFF/REMOTE switch on the wiring chase to the REMOTE position. Pivot the rocker switch on the FWS-1 to the ON position.

Battery Operated Remote Control, FRBC-1 and FRBTC-1
Connect the green and red, stripped and bare, wires on the ON/OFF/REMOTE switch wire harness to the remote receiver that is a component in the FRBC-1 and FRBTC-1. Turn the ON/OFF/REMOTE switch on the wiring chase to the REMOTE position. Follow instructions in the FRBC-1 and FRBTC-1 to complete installation.

Note: If batteries fail in FRBC-1 or FRBTC-1, and immediate heat is desired, turn the ON/OFF/REMOTE switch on wiring chase from the REMOTE position to the ON position.

Electric (120 volt) Operated Remote Control, FREC-1
Connect the green and red, stripped and bare, wires on the ON/OFF/REMOTE switch wire harness to the wires on remote receiver that is a component in the FREC-1. Turn the ON/OFF/REMOTE switch on the wiring chase to the REMOTE position. Follow instructions in the FREC-1 to complete installation.

Note: If electric (120 volt) fails in FREC-1, and immediate heat is desired, turn the ON/OFF/REMOTE switch on wiring chase from the REMOTE position to the ON position.

Wiring of ON/OFF/REMOTE Switch with 750 Millivolt Wall Thermostat Accessory and Another Accessory

Connect the green and red, stripped and bare, wires on the ON/OFF/REMOTE switch wire harness to the 750 millivolt wall thermostat AND to the remote receiver that is a component in the FRBC-1, FREC-1 OR to the FWS-1, wall switch.

1. Connect (1) wire from the 750 millivolt wall thermostat and (1) wire from appropriate accessory to the GREEN, stripped and bare wire from the ON/OFF/REMOTE wire harness.
2. Connect (1) wire from the 750 millivolt wall thermostat and (1) wire from appropriate accessory to the RED, stripped and bare wire from the ON/OFF/REMOTE wire harness.
   Note: When the appliance is in the MANUAL mode and the batteries fail in the FRBC-1 or if the electric (120 volt) fails in the FREC-1, and immediate heat is desired, turn the ON/OFF/REMOTE switch on wiring chase from the REMOTE position to the ON position.

Manual Operation

1. Turn ON/OFF/REMOTE switch on wiring chase to REMOTE position.
2. Turn wall thermostat OFF.
3. Turn accessory, FRBC-1, FREC-1 or FWS-1, ON. Appliance is now in the manual mode. You must turn the appliance ON or OFF with appropriate accessory.

Wall Thermostat Operation

1. Turn the ON/OFF/REMOTE switch on wiring chase to REMOTE position.
2. Turn accessory, FRBC-1, FREC-1 or FWS-1, OFF.
3. Turn wall thermostat ON and set appropriate temperature. Wall thermostat will cycle the appliance ON and OFF.

Installation of Remote Receiver (Figure 17)

1. Attach, from left to right, the slide-on cover plate onto the remote receiver. **ON** will be to the top and **OFF** will be to the bottom on the slide-on cover plate.
2. Push the receiver slide button onto the receiver slide switch. Reverse installation of the slide button if it is off center.
3. Attach velcro loop on the left side of the valve cover support.
4. Attach velcro hook onto remote receiver. The word **TOP** on the remote receiver should be to the top when installed onto valve cover support.
5. Attach velcro hook on remote receiver onto velcro loop on valve cover support..

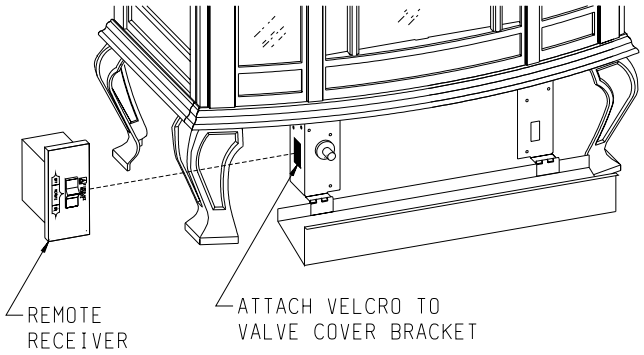


Figure 17

Wiring Diagram (Figure 18)

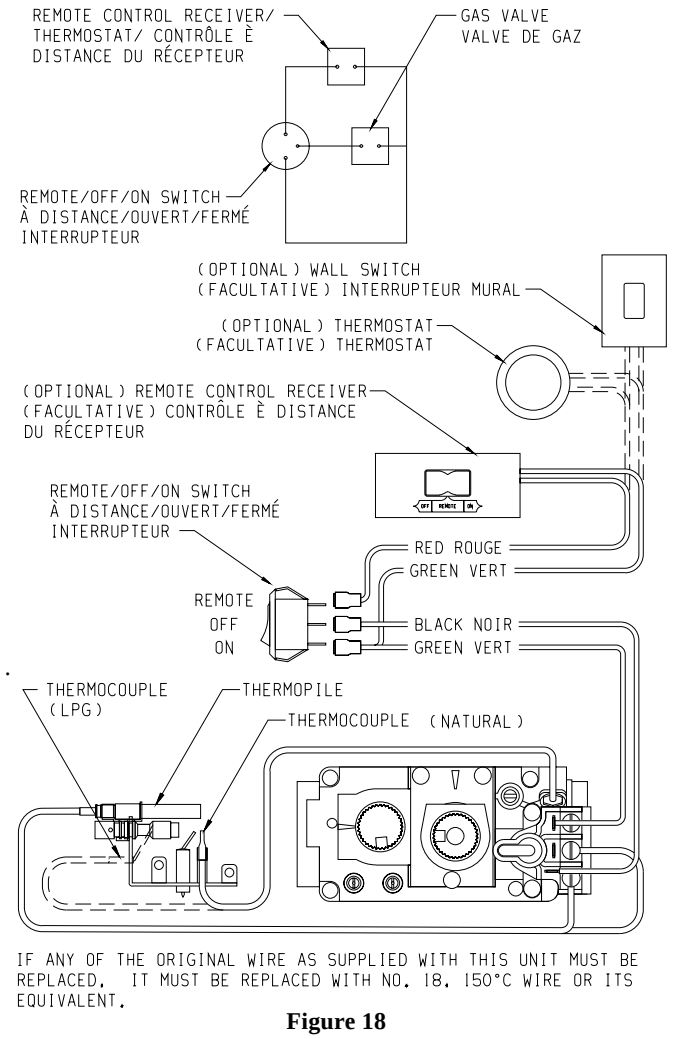


Figure 18

PLEASE NOTE

It is normal for appliances fabricated of steel to give off some expansion and/or contraction noised during the start up or cool down cycle. Similar noises are found with your furnace heat exchanger or car engine.

Installation of Logs (Figure 19)

1. Remove screen front from inner body by removing (4) 1/2" hex-head screws.
2. Remove logs from interior of inner body. Remove all protective packaging from logs and interior of inner body.
3. Align the two rear pins on the base with the two alignment holes on the underside of the rear log. Place the rear log onto the two rear pins on the base.
4. Align the two front pins on the base with the two alignment holes on the underside of the front log. Place the front log onto the two front pins on the base.
5. Align the two pins on the front log with the two alignment holes on the underside of the top log. Place the top log onto the two pins on the front log.
6. Replace and attach screen front onto inner body with (4) 1/2" hex-head screws from Step 1.
7. Installation of logs is completed.

Refer to Figure 19 for the following warning.

Warning: Failure to position the parts in accordance with this diagram or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

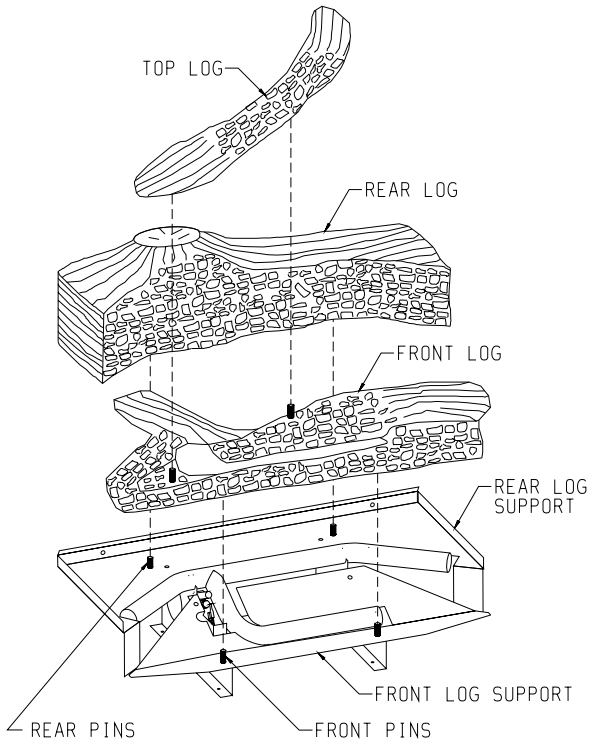


Figure 19

Operating Guidelines

Before operating this heater, please review the safety warnings pages at the beginning of this manual and those precautions and warnings listed below.

1. Know what type of ignition system this model has (standing pilot) and follow the applicable SAFETY and LIGHTING instructions.
2. Check to ensure there are no gas leaks. If you are unsure, turn gas off to the heater and call a service person or your gas utility.

CAUTION: Clothing or other flammable material should not be placed on or near the appliance.

WARNING: Children and adults should be alerted to the hazard of high surface temperature and should stay away to avoid burns or clothing ignition. Young children should be carefully supervised when they are in the same room as the appliance.

3. Tampering is DANGEROUS and voids all warranties. Any component that is found to be faulty, must be replaced with an approved component.

Initial Lighting (Figure 20)

Upon completing the gas line or turning the gas valve "ON" after it has been in the "OFF" position, a small amount of air will be in the lines. When first lighting the appliance, it will take a few minutes for the lines to purge themselves of this air. Once the purging is complete, the appliance will light and operate satisfactorily.

Subsequent lightings of the appliance will not require such purging if the gas valve is not turned to "OFF."

Standing Pilot Operation

1. Follow the SAFETY and LIGHTING INSTRUCTIONS for standing pilot controls found in this manual and on labels found attached to the appliance.

CAUTION: During the initial purging and subsequent lightings, never allow the gas valve control knob to remain depressed in the "pilot" position without pushing the piezo ignitor button at least once every second.

2. During the heating season, leave the control valve knob in the "ON" position. This will allow the pilot flame to remain lit. Turn the burner flame on or off with the appliance ON/OFF rocker switch, wall switch, remote control kits or 750 millivolt wall thermostat.

NOTE: The gas control valve allows you to increase or decrease the height of the main burner flame. The control valve has a pressure regulator with a knob as shown in Figure 20. Rotate the knob clockwise to "HI" to increase the flame height and counterclockwise to "LO" to decrease the flame height.

3. When the heating season is over, turn the on/off switch to "OFF" and the control valve to "OFF". The system, including the pilot light, will be shut down.

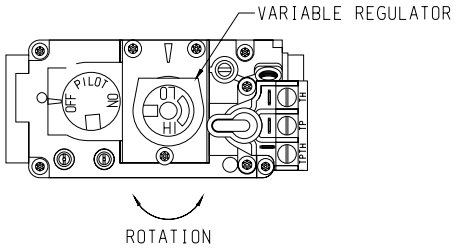


Figure 20

Maximum and Minimum Input

The gas valve on the appliance allows the input to adjust between a maximum input of 25,000 Btuh for Natural gas and Propane gas to a minimum input of 17,000 Btuh for Natural and 18,000 Btuh for Propane. Please be advised, the maximum input provides the greatest amount of yellow flame and ember glow on the log set. The minimum input substantially decreases the yellow flame and ember glow on the log set.

Maintenance & Service Instructions

IMPORTANT: Turn off gas before servicing appliance. It is recommended that a competent service technician perform these check-ups at the beginning of each heating season.

- **Clean Burner and Control Compartment**

  Keep the control compartment, logs, and burner areas surrounding the logs clean by vacuuming or brushing at least twice a year.

  Cleaning Procedure (Figure 21)

  1. Turn off pilot light at gas valve.
  2. Remove screen front. (4 hex-head screws)
  3. Vacuum burner compartment especially around orifice/primary air openings.
  4. Replace screen front. (4 hex-head screws)
  5. Ignite pilot. (See Lighting/Operating Section of Manual)
  6. Operate the main burner and visually check to make sure the flame pattern appears similar to the pictorial illustration shown for proper main burner flame pattern, Figure 15. If it appears abnormal call a service person.

Verify proper operation after servicing.

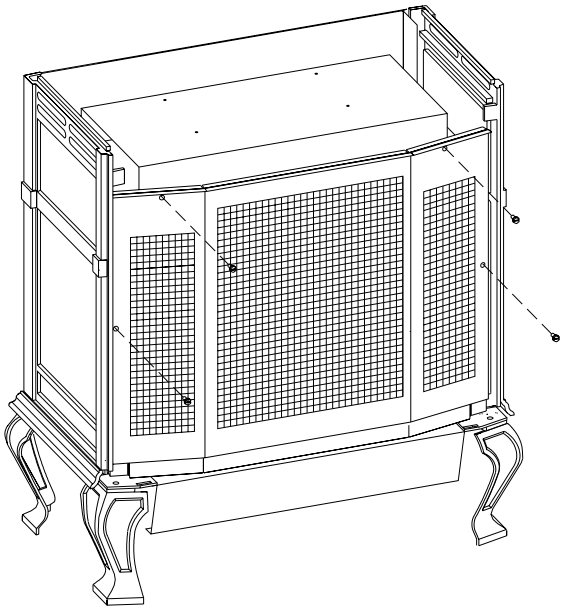


Figure 21

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.

B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

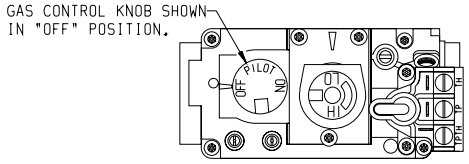
- **Do not try to light any appliance.**
- **Do not touch any electrical switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.

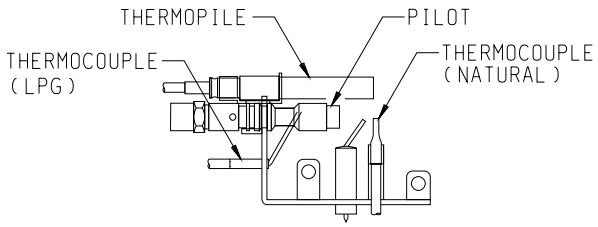
D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

1. **STOP! Read the safety information above.**
2. **Set the thermostat to lowest setting.**
3. **Turn off all electric power to the appliance (if applicable).**
4. **Lower valve cover.**
5. **Push in gas control knob slightly and turn clockwise to "OFF".**



6. **Wait ten (10) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above. If you don't smell gas, go to the next step.**
7. **Find pilot - The pilot is attached to the main burner behind the front log.**



8. **Turn knob on gas control counterclockwise to "PILOT."**
9. **Push in gas control knob all the way and hold in. Repeatedly push the piezo ignitor button until pilot is lit. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 9.**
   - **If knob does not pop up when released, stop and immediately call your service technician or gas supplier.**
   - **If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.**
10. **Attention! Gas control has an INTERLOCK latching device. When the pilot is initially lit and the safety magnet is energized (pilot stays "ON") the INTERLOCK latching device becomes operative. If the gas control is turned to the "OFF" position or gas flow to the appliance is shut off, the pilot cannot be relighted until the safety magnet is de-energized (approximately 60 seconds). There will be an audible "click" when the safety magnet in the gas control is de-energized. Pilot can now be relighted. Repeat steps 5 through 9.**
11. **Turn gas control knob counterclockwise to "ON".**
12. **Raise valve cover.**
13. **Turn on all electric power to the appliance (if applicable).**
14. **Set thermostat to desired setting.**

TO TURN OFF GAS TO APPLIANCE

1. **Set the thermostat to lowest setting.**
2. **Turn off all electric power to appliance if service is to be performed (if applicable).**
3. **Lower valve cover.**
4. **Push in gas control knob slightly and turn clockwise to "OFF". Do not force.**
5. **Raise valve cover.**

TROUBLE-SHOOTING

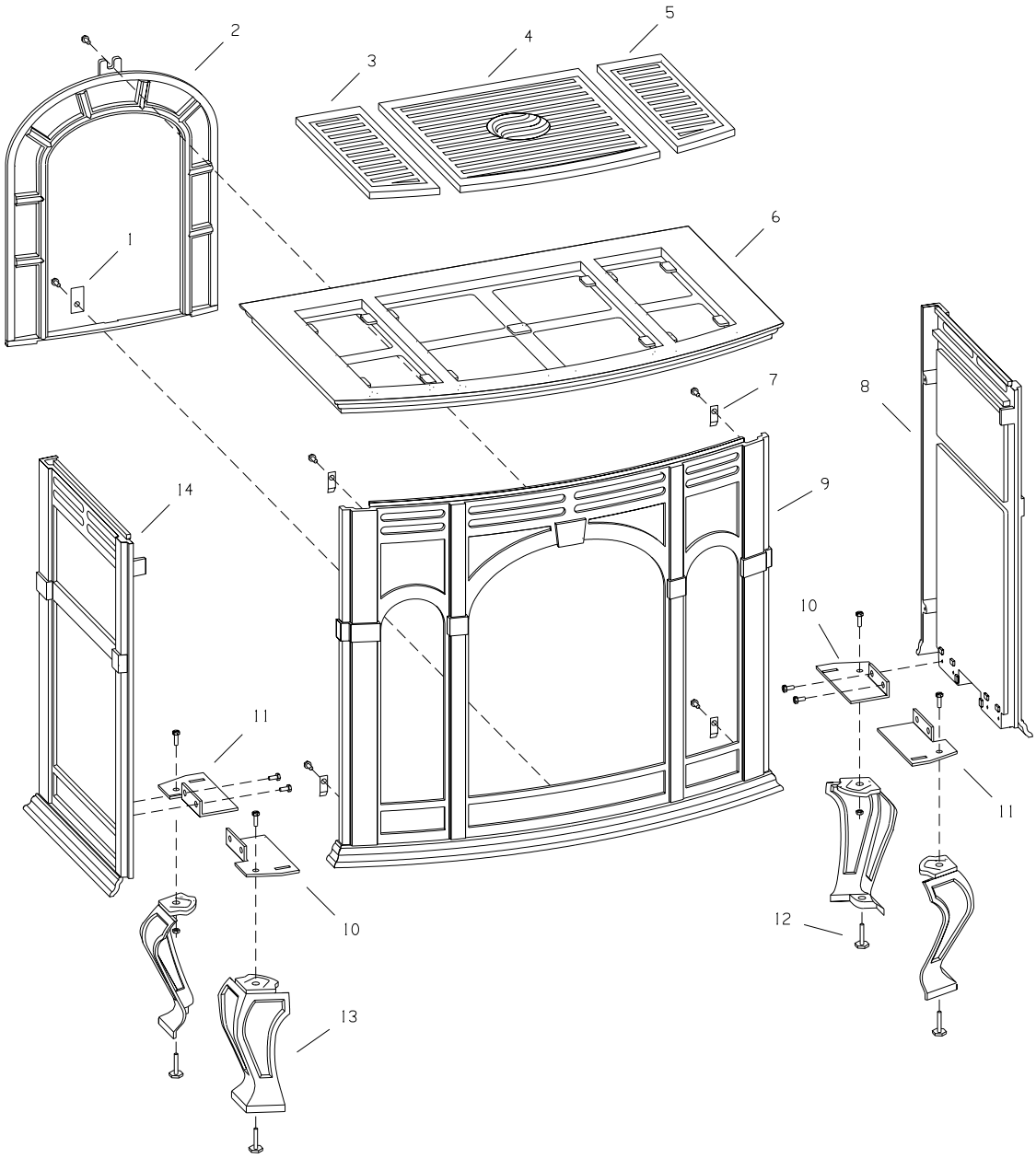
SYMPTOMS - POSSIBLE CAUSES AND CORRECTIONS

IMPORTANT: Operating heater where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors.

1. **When ignitor button is pressed, there is no spark at ODS/ pilot.**
   a. Ignitor electrode positioned wrong - Replace ignitor.
   b. Ignitor electrode broken - Replace ignitor.
   c. Ignitor electrode not connected to ignitor cable - Reconnect ignitor cable.
   d. Ignitor cable pinched or wet - Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry.
   e. Broken ignitor cable - Replace ignitor cable.
   f. Bad piezo ignitor - Replace piezo ignitor.
2. **When ignitor button is pressed, there is spark at ODS/pilot, but no ignition.**
   a. Gas supply turned off or manual shutoff valve closed - Turn on gas supply or open manual shutoff valve.
   b. Control knob not in PILOT position - Turn gas control knob to PILOT position.
   c. Control knob not pressed in while in PILOT position - Press in control knob while in PILOT position.
   d. Air in gas lines when installed - Continue holding down control knob. Repeat igniting operation until air is removed.
   e. Depleted gas supply - Contact local gas company.
   f. ODS/pilot is clogged - Clean ODS/pilot or replace ODS/pilot assembly.
   g. Gas regulator setting is not correct - Replace gas regulator.
3. **ODS/pilot lights but flame goes out when control knob is released.**
   a. Control knob not fully pressed in - Press in control knob fully.
   b. Control knob not pressed in long enough - After ODS/pilot lights, keep control knob pressed in 30 seconds.
   c. Safety interlock system has been triggered (thermostat models only) - Wait one minute for safety interlock system to reset. Repeat ignition operation.
   d. Manual Shutoff valve not fully open - Fully open manual shutoff valve.
   e. Thermocouple connection loose at control valve - Hand tighten until snug, then tighten 1/4 turn more.
   f. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by either **1) low gas pressure** - Contact local gas company or **2) dirty or partially clogged ODS/pilot** - Clean ODS/pilot or replace ODS/pilot assembly.
   g. Thermocouple damaged - Replace thermocouple.
   h. Control valve damaged - Replace control valve.
4. **Main burner does not light after ODS/pilot is lit.**
   a. Main burner orifice clogged - Clean main burner or replace main burner orifice.
   b. Main burner orifice diameter is too small - Replace main burner orifice.
   c. Inlet gas pressure is too low - Contact local gas company.
5. **Pilot burning, no gas to burner, valve knob "ON", on/off switch "ON."**
   a. "On/Off" switch, wall switch, remote control or wires defective - Check "on/off" switch and wires for proper connections. Place jumper wires across terminal at switch - if burner comes on, replace defective switch. If OK, place jumper wires across switch wires at gas valve-if burner comes on, wires are faulty or connections are bad.
   b. Thermopile may not be generating sufficient millivolts - If the pilot flame is not close enough physically to the thermopile, clean the ODS/pilot.
   - Be sure the wire connections from the thermopile at the gas valve terminals are tight and the thermopile is fully inserted into the pilot bracket.
   - Check the thermopile with a millivolt meter. Take the reading at TH-TP & TP terminals of the gas valve. The meter should read 350 millivolts minimum, while holding the valve knob depressed in the PILOT position, with the pilot lit, and the ON/OFF switch in the OFF position. Replace the faulty thermopile if the reading is below the specified minimum.
   - With the pilot in the ON position, disconnect the thermopile leads from the valve. Take a reading at the thermopile leads. The reading should be 350 millivolts minimum. Replace the thermopile if the reading is below the minimum.
   c. Defective valve - Turn valve knob to "ON." Place ON/OFF switch to "ON." Check with millivolt meter at thermopile terminals. Millivolt meter should read greater than 200 millivolts. If the reading is okay and the main burner does not ignite, replace the gas valve
   d. Plugged main burner orifice - Check main burner orifice for blockage and remove.
6. **Delayed ignition of main burner.**
   a. Manifold pressure is too low - Contact local gas company.
   b. Main burner orifice clogged - Clean main burner and main burner orifice.
7. **Main burner backfiring during combustion.**
   a. Main burner orifice is clogged or damaged - Clean main burner and main burner orifice or replace main burner orifice.
   b. Damaged main burner - Replace damaged main burner.
   c. Gas regulator defective - Replace gas regulator.
8. **Yellow flame in front section of main burner during main burner combustion.**
   a. Not enough air - Check main burner for dirt and debris. If found, clean main burner.
   b. Gas regulator defective - replace gas regulator.
9. **Slight smoke or odor during initial operation.**
   a. Residues from manufacturing processes and logs curing - Problem will stop after a few hours of operation.
10. **Heater produces a whistling noise when main burner is lit.**
    a. Turning control knob to HI position when main burner is cold - Turn control knob to LO position and let warm up for a minute.
    b. Air in gas line - Operate main burner until air is removed from line. Have gas line checked by local gas company.
    c. Air passageways on heater blocked - Observe minimum installation clearances (see page 4).
    d. Dirty or partially clogged main burner orifice - Clean main burner and main burner orifice or replace main burner orifice.
11. **Heater produces a clicking/ticking noise just after main burner is lit or shut off.**
    a. Metal expanding while heating or contracting while cooling - This is common with most heaters. If noise is excessive, contact service person.
12. **Heater produces unwanted odor.**
    a. Heater burning vapors from paint, hair spray, glues, cleaners, chemicals, new carpet, etc. - Open window to ventilate room. Stop using odor causing products while heater is operating.
    b. Low fuel supply - Refill supply tank.
    c. Gas leak - Locate and correct all leaks.
13. **Heater shuts off in use (ODS operates).**
    a. Not enough fresh air is available - Open window and/or door for ventilation.
    b. Low line pressure - Contact local gas company.
    c. ODS/pilot is partially clogged - Clean ODS/pilot.
14. **Gas odor even when control knob is in OFF position.**
    a. Gas leak - Locate and correct all leaks.
    b. Control valve defective - Replace control valve.
15. **Gas odor during combustion.**
    a. Foreign matter between logs and main burner - remove foreign matter.
    b. Gas leak - Locate and correct all leaks.

STOVE CASTING

MODELS: CIFB-1, CIPB-1, CIPG-1, CIPS-1, CIPN-1, CIPR-1



How To Order Repair Parts . . .

Parts can be ordered **only** through your **service person or dealer.** For best results, the **service person or dealer** should order parts through the distributor. Parts can be shipped directly to the **service person/dealer**.

All parts listed in the Parts List have a Part Number. When ordering parts, first obtain the Model Number from the name plate on your equipment. Then determine the Part Number (**not** the Index Number) and the Description of each part from the following appropriate illustration and list. Be sure to give all this information . . .

Heater Model Number _____ Part Description _____

Heater Serial Number _____ Kind of Gas (Propane or Natural) _____

Part Number _____

Do not order bolts, screws, washers or nuts. They are standard hardware items and can be purchased at any local hardware store.

Shipments contingent upon strikes, fires and all causes beyond our control.

PLEASE NOTE: When ordering parts, it is very important that **part number** and **description** of part coincide.

Parts List for CIVF-25 Firebox

Index No.	Part Number	Description
1	R-3436	REMOTE/OFF/ON SWITCH
2	CI-326	SWITCH BOX
3	CI-328	WIRE CHANNEL
4	CI-335	REAR COVER
5	CI-188	OUTLET BAFFLE
6	CI-287	INNER TOP
7	CI-391	REFLECTOR
8	CI-280	INNER BODY
9	CI-380	SCREEN FRAME ASSEMBLY
10	R-2708	PIEZO IGNITOR
11	CI-068	VALVE COVER ASSEMBLY
12	CI-253	MAGNET ASSEMBLY (2 REQUIRED)
13	* CI-008	LEG PAD-A (2 REQ'D)
14	* CI-009	LEG PAD-B (2 REQ'D)
15	CI-288	INNER BOTTOM FACE
16	CI-181	INNER BOTTOM ASSEMBLY
17	R-3625	GAS VALVE - LPG
17	R-3626	GAS VALVE - NAT
18	P-86-54L	ORIFICE-LPG
18	P-86-40N	ORIFICE-NAT
19	CI-176	MANIFOLD ASSEMBLY
20	CI-023	BURNER BRACKET - RIGHT
21	CI-258	AIR SHUTTER BODY - NAT
21	CI-259	AIR SHUTTER BODY - LPG
22	R-5278	BURNER
23	R-3623	PILOT ASSEMBLY-LPG
23	R-3624	PILOT ASSEMBLY-NAT
24	CI-180	PILOT TUBING
25	CI-166	BURNER BRACKET - LEFT
26	CI-347	LOG SUPPORT ASSEMBLY
27	CI-351	LOG SUPPORT BAFFLE
28	R-3642	FRONT LOG
29	R-3644	TOP LOG
30	R-3643	REAR LOG
NOT SHOWN	CI-348	SWITCH BOX INSULATION
NOT SHOWN	R-2789	ELECTRODE WIRE
NOT SHOWN	* R-3747	LEVELING BOLT (4 REQUIRED)
NOT SHOWN	* CI-007	RETAINING TAB (4 REQUIRED)
NOT SHOWN	R-3765-A	WIRE ASSEMBLY
NOT SHOWN	M-166	MANIFOLD ORIFICE GASKET

* PART IS INCLUDED IN THE HARDWARE PACKAGE AND IS USED IN THE ASSEMBLY OF THE STOVE CASTING

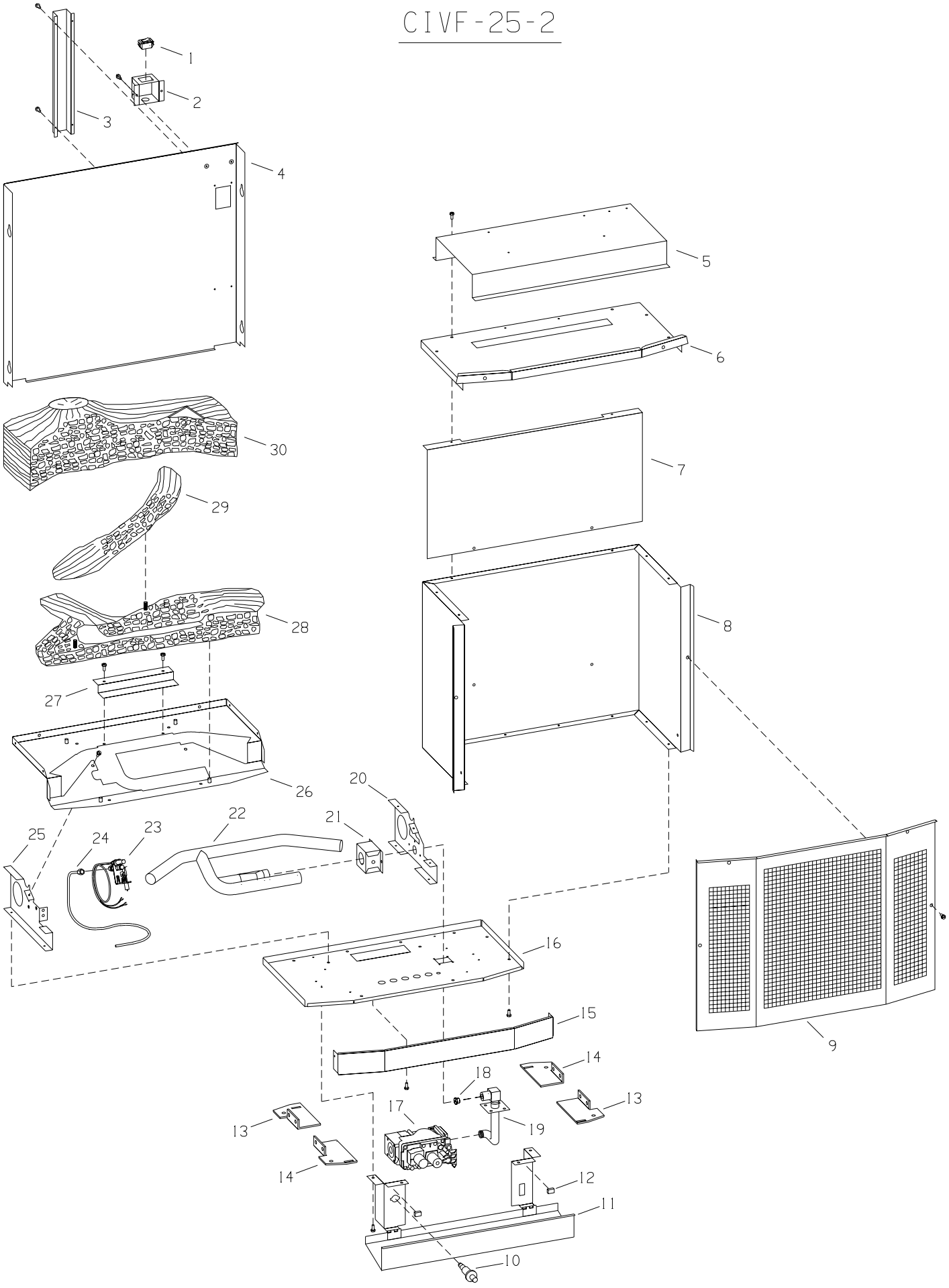
Parts List for Stove Casting

Index No.	Part Number	Description
1	*CI-006	WINDOW RETAINING TAB
2	R-3948	WINDOW (BLACK PAINT)
2	R-3688	WINDOW (BLACK ENAMEL)
2	R-3696	WINDOW (SAND ENAMEL)
2	R-3704	WINDOW (GREEN ENAMEL)
2	R-3712	WINDOW (RED ENAMEL)
2	R-3720	WINDOW (NAVY ENAMEL)
3	R-3949	GRILL - LEFT (BLACK PAINT)
3	R-3726	GRILL - LEFT (BLACK ENAMEL)
3	R-3729	GRILL - LEFT (SAND ENAMEL)
3	R-3732	GRILL - LEFT (GREEN ENAMEL)
3	R-3735	GRILL - LEFT (RED ENAMEL)
3	R-3738	GRILL - LEFT (NAVY ENAMEL)
4	R-3950	GRILL - CENTER (BLACK PAINT)
4	R-3727	GRILL - CENTER (BLACK ENAMEL)
4	R-3730	GRILL - CENTER (SAND ENAMEL)
4	R-3733	GRILL - CENTER (GREEN ENAMEL)
4	R-3736	GRILL - CENTER (RED ENAMEL)
4	R-3739	GRILL - CENTER (NAVY ENAMEL)
5	R-3951	GRILL - RIGHT (BLACK PAINT)
5	R-3728	GRILL - RIGHT (BLACK ENAMEL)
5	R-3731	GRILL - RIGHT (SAND ENAMEL)
5	R-3734	GRILL - RIGHT (GREEN ENAMEL)
5	R-3737	GRILL - RIGHT (RED ENAMEL
5	R-3740	GRILL - RIGHT (NAVY ENAMEL)
6	R-3944	TOP (BLACK PAINT)
6	R-3683	TOP (BLACK ENAMEL)
6	R-3691	TOP (SAND ENAMEL)
6	R-3699	TOP (GREEN ENAMEL)
6	R-3707	TOP (RED ENAMEL)
6	R-3715	TOP (NAVY ENAMEL)
7	* CI-007	RETAINING TAB - 4 REQUIRED
8	R-3946	SIDE - RIGHT (BLACK PAINT)
8	R-3685	SIDE - RIGHT (BLACK ENAMEL)
8	R-3693	SIDE - RIGHT (SAND ENAMEL)
8	R-3701	SIDE - RIGHT (GREEN ENAMEL)
8	R-3709	SIDE - RIGHT (RED ENAMEL)
8	R-3717	SIDE - RIGHT (NAVY ENAMEL)
9	R-3947	FRONT (BLACK PAINT)
9	R-3687	FRONT (BLACK ENAMEL)
9	R-3695	FRONT (SAND ENAMEL)
9	R-3703	FRONT (GREEN ENAMEL)
9	R-3711	FRONT (RED ENAMEL)
9	R-3719	FRONT (NAVY ENAMEL)
10	***** CI-009	LEG PAD "B" - 2 REQUIRED
11	***** CI-008	LEG PAD "A" - 2 REQUIRED
12	***** R-3747	LEVELING BOLT - 4 REQUIRED
13	R-3952	LEG - 4 REQUIRED (BLACK PAINT)
13	R-3742	LEG - 4 REQUIRED (BLACK ENAMEL)
13	R-3743	LEG - 4 REQUIRED (SAND ENAMEL)
13	R-3744	LEG - 4 REQUIRED (GREEN ENAMEL)
13	R-3745	LEG - 4 REQUIRED (RED ENAMEL)
13	R-3746	LEG - 4 REQUIRED (NAVY ENAMEL)
14	R-3945	SIDE - LEFT (BLACK PAINT)
14	R-3684	SIDE - LEFT (BLACK ENAMEL)
14	R-3692	SIDE - LEFT (SAND ENAMEL)
14	R-3700	SIDE - LEFT (GREEN ENAMEL)
14	R-3708	SIDE - LEFT (RED ENAMEL)
14	R-3716	SIDE - LEFT (NAVY ENAMEL)

***** PART IS NOT SUPPLIED WITH CASTING, IT IS INCLUDED IN THE FIREBOX HARDWARE PACKAGE

USE ONLY MANUFACTURER'S REPLACEMENT PARTS. USE OF ANY OTHER PARTS COULD CAUSE INJURY OR DEATH.

CIVF-25-2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OPTIONAL BLOWER CIB-2
Unvented Room Heater CIVF-25

Installing Optional CIB-2 Blower

1. Loosen, but do not remove, (4) hex-head screws located on the exterior, bottom of the appliance.
2. Position the blower assembly at the rear of the appliance. The blower assembly has (4) keyholes for attachment to the exterior, bottom of the appliance.
3. Place the large diameter holes in the keyholes over and behind the (4) hex-head screws that were loosened in Step 1. Push inward on the blower assembly to lock the keyholes into position behind the screws. Tighten (4) hex-head screws to secure blower assembly to exterior, bottom of the appliance.
4. Remove wire channel from rear cover by removing (4) hex-head screws. **Note:** If optional blower is being installed during initial installation of appliance, the wire channel will not be attached to casing back. (Refer to **Installation of Wire Channel Assembly**, Page 9)
5. Remove casing top and casing front from outer casing.
6. If optional stone inlay is installed in casing top, remove the 12" x 19 3/8" heat shield from the heat exchanger top by removing (4) 1/2" hex-head screws.
7. When facing the rear of the appliance, insert fan control shield between rear cover and inner body of appliance on the left side of the rear cover.
8. Attach fan control shield to top of inner body with (2) #10 x 1/2" screw provided in hardware package.
9. If applicable, attach 12" x 19 3/8" heat shield to heat exchanger top with (4) 1/2" hex-head screws from Step 6.
10. Place the casing top onto the outer casing. The casing top nests into the outer casing.
11. Attach fan control to FLAT, fan control bracket (Part 9A, Page 20) with (2) 6 x 1/4" screws provided in hardware package.
12. Attach fan control with bracket onto the wire channel by using (2) 8 x 1/4" screws provided in hardware package.
13. Route wires from fan control and ON/OFF/REMOTE switch within wire channel.
14. When facing the rear of the appliance, align and insert fan control with bracket into 1 3/8" x 2" opening on the left side of the rear cover.
15. Attach wire channel to rear cover by using (4) hex-head screws removed in Step 4. (Refer to **Installation of Wire Channel Assembly**, Page 9)
16. Insert AUTO/OFF/ON switch into rectangular notch on valve bracket. Be sure to insert AUTO/OFF/ON switch with letters (words) upright. (See wiring diagram)
17. Attach 1/4" push-on terminal from blue wire on the fan control to the AUTO (top) tab on the switch.
18. Attach 1/4" push-on terminal from black wire to the OFF (middle) tab on the switch.
19. Attach 1/4" push-on terminal from white wire on the fan control to the ON (bottom) tab on the switch.
20. Installation of optional CIB-2 blower is completed.

Fan Control

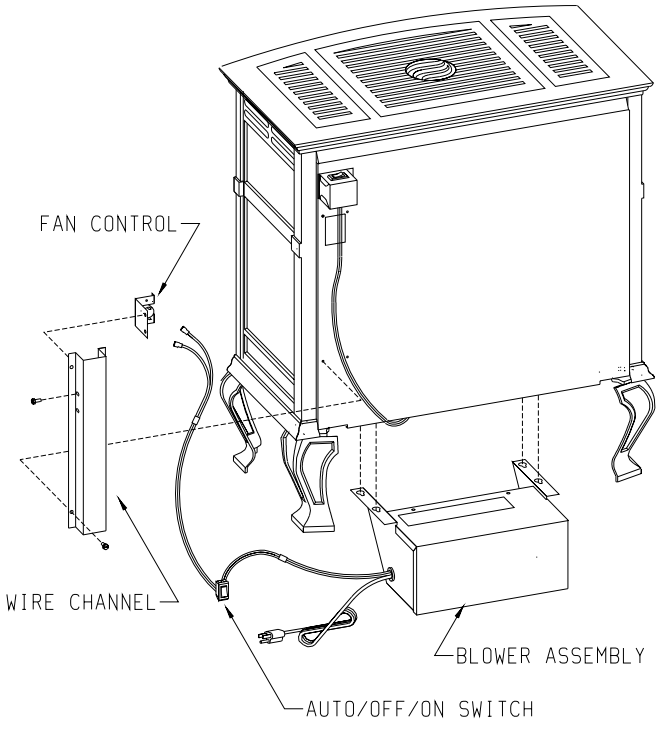
The fan control is a non-adjustable automatic type. The fan control will require between 5 and 10 minutes of main burner operation before the fan control "closes" and activates the blower. The blower will continue to run between 5 and 10 minutes after the main burner shuts off, before the fan control "opens" and deactivates the blower.

Wiring

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electrical Code ANSI/NFPA No. 70*, if an external electrical source is utilized. **This appliance is equipped with a three-prong [grounding] plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.** For an ungrounded receptacle, an adapter, which has two prongs and a wire for grounding, can be purchased, plugged into the ungrounded receptacle and its wire connected to the receptacle mounting screws. With this wire completing the ground, the appliance cord plug can be plugged into the adapter and be electrically grounded.

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

WARNING:
Unplugging of blower accessory will not stop the heater from cycling. To shut heater off: Turn temperature dial or thermostat to lowest setting. Turn knob on gas control to "OFF", depressing slightly. Do not force.

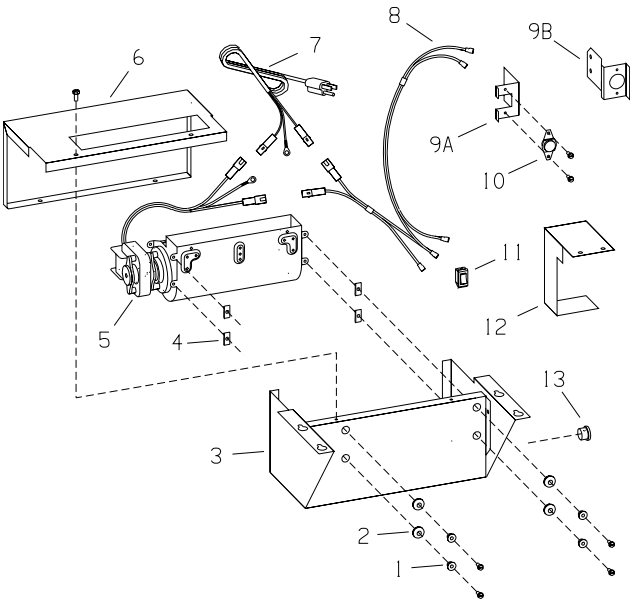


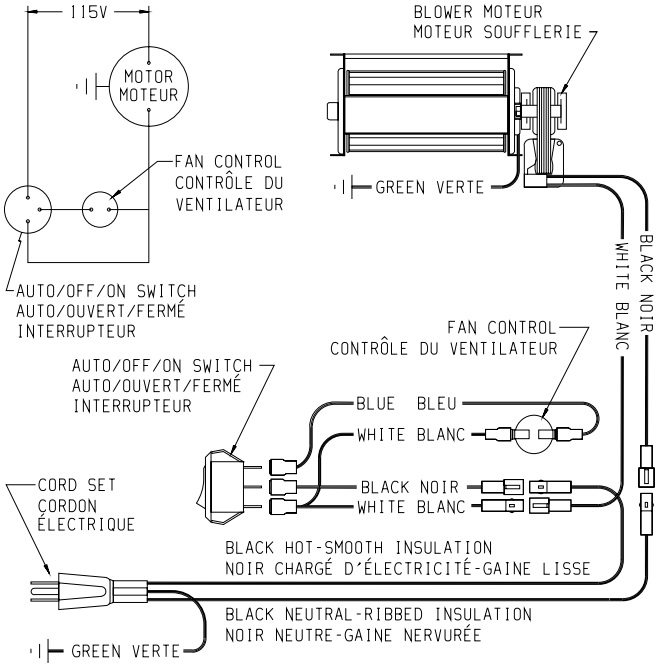
Cleaning

The blower wheel will collect lint and could require cleaning once a year. If the air output decreases or the noise level increases, it indicates a dirty wheel.

Blower Motor

The blower motor does not have oiling holes. Do not attempt to oil blower motor.





IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THIS UNIT MUST BE REPLACED, IT MUST BE REPLACED WITH NO. 18, 150°C WIRE OR ITS EQUIVALENT.

PARTS LIST

Index No.	Part No.	Description
1	R-1454	Brass Bushing (4 Required)
2	R-1499	Rubber Grommet (4 Required)
3	CI-002	Blower Housing
4	R-1517	Tinnerman Clip (4 Required)
5	R-2804-A	Blower Assembly
6	CI-003	Blower Housing Cover
7	R-2099	Cord Set
8	R-3767-A	Wire Harness
9A	CI-004	Fan Control Bracket (Use with CIBV-30, CIVF-25, CIVF-25C Only)
9B	CI-325	Fan Control Bracket (Use with CIDV-30 Only)
10	R-2503	Fan Control
11	R-2805	Auto/Off/On Switch
12	CI-220	Fan Control Shield (Use with CIVF-25-1 only)
13	R-1410	Bushing 7/8" Dia.